Inventor:

William D. Huse

Serial No.: Filed:

08/471,622 June 5, 1995

Page 2

1. (Amended) A composition of matter comprising a plurality of prokaryotic cells containing diverse combinations of first and second DNA sequences encoding first and second polypeptides which form heteromeric receptors, said first and second DNA sequences contained in vectors, one or both of said polypeptides being expressed as a fusion protein with the protein product of gene VIII of a filamentous bacteriophage [proteins] on the surface of a cell.

(Amended) A cloning system for the coexpression 16. of two or more DNA sequences encoding polypeptides which form a heteromeric receptor, comprising a set of first vectors having a diverse population of first DNA sequences and a set of second vectors having a diverse population second DNA sequences, said first and second vectors having two pairs of restriction sites symmetrically oriented about a cloning site for containing said first and second populations of DNA sequences, said two pairs of restriction sites in an opposite orientation with respect to the cloning site on each vector, sequences between said first pair of restriction sites in said two vectors being homologous enough to allow annealing, and sequences between said second pair of restriction sites in said two vectors being homologous enough to allow annealing, so as to allow only the operational combination of vector sequences containing said first and second DNA sequences.

£2

Inventor:

William D. Huse

Serial No.:

08/471,622 June 5, 1995

Filed: Page 3

26. (Amended) A plurality of expression vectors, each vector containing a [plurality of] first and second DNA sequence [sequences] encoding a [plurality of] first and second polypeptide of a heteromeric receptor, [polypeptides] which form a plurality of heteromeric receptors, one or more of said receptors exhibiting binding activity toward a preselected molecule, said first or second DNA sequence [encoding heteromeric receptors] being operatively linked to gene VIII of a filamentous bacteriophage [genes encoding surface proteins of a cell].

F4

28. (Amended) The expression vectors of claim <u>26</u> [23], wherein said heteromeric receptors are selected from the group consisting of antibodies, T cell receptors, integrins, hormone receptors and transmitter receptors.



32. (Amended) The expression vectors of claim $\underline{26}$ [31], wherein said filamentous bacteriophage are selected from the group consisting of M13, fd and fl.

REMARKS

Claims 1-5, 7, 8, 16-33 and 66-77 are pending.
Claims 1, 16, 26, 28 and 33 have been amended above. Claims 8, 33 and 76 have been canceled without prejudice. Accordingly, following entry of the amendments herein, claims 1-5, 7, 16-32, 66-75 and 77 will be under consideration.

Support for the amendment to claim 1 to recite that one or both of the heteromeric subunits is expressed as a fusion